

REMARKS

Reconsideration of the application is requested.

Claims 1-16 remain in the application. Claims 1-16 are subject to examination.

In order to expedite examination, Examiner Patel has invited applicant to comment on U.S. patent No. 6,229,716 to Preller (hereinafter Preller) in regards to reading on the instant application.

At first, it is believed that an explanation of the fundamental functional principles of a free-running transducer may be helpful. In a free-running transducer, a switch connected in series to a primary coil of a transformer is opened and closed in a clocked manner. The duration of the drive pulses for which the switch is closed is dependent upon a control signal being dependent upon the output voltage in order to control the voltage present at the output to a predetermined value. When the switch is closed, the primary coil connected in series to the switch receives energy, which, with a subsequently opened switch, is given to a secondary coil coupled to output clamps. The fundamental functional principle of a free-running transducer thus

provides that the switch is turned on, i.e. the individual drive pulses are begun when the primary coil is free of energy after opening the switch.

Preller describes a transducer wherein drive pulses for driving a switch are generated, the duration of which is dependent upon a control signal being dependent upon the output voltage. The points in time at which the individual drive pulses begin are predetermined by a start signal. At a normal load, the start signal ensures that the individual drive pulses are generated such that they begin immediately after the primary coil of the transformer connected in series to the switch is free of energy. When the power consumption of a load connected to the transducer is low, the transducer according to Preller provides that the start signal is generated such that the individual drive pulses do not immediately begin after the primary coil is free of energy but that the individual drive pulses only begin in a time-delayed manner. Thus, the switching frequency (FK2) illustrated in Fig. 13 can be obtained for low output power P_{OUT} . If, at a low load of the transducer, a respective drive pulse were generated immediately after the primary coil is free of energy, the switching frequency in low loads would increase corresponding to the curve FK1 illustrated in Fig. 13.

The time duration of the individual drive pulses in the transducer according to Preller is exclusively dependent upon the control signal in a normal operating state as well as a low-load operating state.

Contrary thereto, the method according to the invention of the instant application provides the modulation of the pulse duration of at least one of the two pulses appertaining to one pulse sequence by a modulation signal within a region predetermined by the control signal. Such a modulation is not provided in the transducer according to Preller which controls its switch partially in dependence on the load state. Claims 1 and 14 of the instant application recite the modulation signal and how the modulation signal is used.

In view of the foregoing, reconsideration and allowance of claims 1-16 are solicited.

Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner

Appl. No. 10/661,337
Amdt. Dated August 15, 2005
Reply to Office Action of February 28, 2005

and Greenberg, P.A., No. 12-1099.

Respectfully submitted,



For Applicant

REL:cgm

RALPH E. LOCHER
REG. NO. 41,947

August 15, 2005

Lerner and Greenberg, P.A.
P.O. Box 2480
Hollywood, Florida 33022-2480
Tel.: (954) 925-1100
Fax: (954) 925-1101